

and configuration of rooms, doorways and stairways to provide appropriate wheelchair access.

As better understood with reference to FIGURE 7, an alternative embodiment of the present invention provides design tool packaging 70 in association with the design tool, including the wand. Design tool packaging 70 comprises pliable support structure 72, preferably made from Urethane foam, out of which one or more holes 74 and 76 are cut. Each hole 74 is sized to receive a scaled icon figure and corresponding base so as to prominently display the icon figure outwards from support structure 72. Each hole 76 is sized to receive a corresponding wand. The design tool packaging is slidably encased by an exterior translucent film material 76, preferably polycarbonate film. When in use around the design tool packaging, the film material maintains the design tool, including wand, securely within the design tool packaging, and protects the design tool and wand, while at the same time providing convenient viewing of the packaging contents.

While the preferred embodiment of the invention has been illustrated and described, as noted above, many changes can be made without departing from the spirit and scope of the invention. For example, the icon figure and base could be merged into a single piece. In addition, the design tool could be fitted with one or more metal plates or magnets and moved according to magnetic attraction between the metal plates and magnets and a metal plate or magnet separate from the design tool. It is likewise contemplated that the design tool could be automated to move according to a programmed pattern without a manual interface, such as part of a computer routine, or through use of remote controlled operation. Accordingly, the scope of the invention is not limited by the disclosure of the preferred embodiment. Instead, the invention should be determined entirely by reference to the claims that follow.

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A design tool for use in association with design plans having hallways, doorways, stairways, rooms and other spaces of a known scale, for functional and space planning in the fields of architecture, interior design, and construction of residential and commercial structures, comprising a member having a first surface and a second surface, the second surface engageable with the design plans, the member scaled to indicate a turning radius to imitate the turning radius of a support device used by persons with disabilities and the aging population.

2. The design tool of claim 1, wherein the member is shaped as a human seated in a wheelchair, and includes an upper torso portion, a lower torso portion, a head portion, and a wheelchair portion having wheels on both sides of the human shape and a chair back at the rear of the human shape.

3. The design tool of claim 1, further comprising a wand extending from and supporting the member in operation of the design tool, the wand having a first end and a second end.

4. A design tool for use in association with design plans having hallways, doorways, stairways, rooms and other spaces of a known scale, for functional and space planning in the fields of architecture, interior design, and construction of residential and commercial structures, comprising a member having a first surface and a second surface, the second surface engageable with the design plans, the member scaled to indicate a turning radius to imitate the turning radius of a support device used by persons with disabilities and the aging population, and a wand extending from and supporting the member in operation of the design tool.

5. The design tool of claim 4, wherein the icon figure is shaped as a human seated in a wheelchair, and includes an upper torso portion, a lower torso portion, a head portion, and a wheelchair portion having wheels on both sides of the human shape and a chair back at the rear of the human shape.

6. A design tool for use in association with design plans having hallways, doorways, stairways, rooms and other spaces of a known scale, for functional and space planning in the fields of architecture, interior design, and construction of residential and commercial

structures, comprising a base having a first surface and a second surface, the second surface engageable with the design plans, the base scaled to indicate a turning radius to imitate the turning radius of a support device used by persons with disabilities and the aging population, and an icon figure attached to the first surface of the base, the icon figure sized to the scale of the design plans to allow accurate representation of the movement of persons with disabilities and the aging population along the hallways, doorways, stairways, rooms and other spaces of the design plan to visually illustrate the feasibility of movement along the noted paths in light of the size and turning radius of the represented person.

7. The design tool of claim 6, further comprising a wand extending from and supporting the icon figure in operation of the design tool, the wand having a first end and a second end.

8. The design tool of claim 7, wherein the icon figure includes an opening having an upper end and a base, the opening corresponds in size to the first end of the wand, and the first end of the wand is maintained within the opening of the icon figure.

9. The design tool of claim 8, wherein the first end of the wand is maintained within the opening of the icon figure by frictional contact of the first end of the wand to the interior of the opening.

10. The design tool of claim 8, wherein the icon figure includes a metal plate located at the base of the opening, the first end of the wand includes a magnet, and the wand is maintained within the opening of the icon figure by the metal place-magnet combination.

11. The design tool of claim 8, wherein the opening of the icon figure includes first ridge members along the interior of the opening, the first end of the wand includes second ridge members corresponding to the first ridge members along the interior of the opening, and the wand is maintained within the opening of the icon figure by the snap-lock combination between the first and second ridge members.

12. The design tool of claim 6, wherein the base has a diameter equal to or greater than the diameter of the icon figure.

13. The design tool of claim 6, wherein the icon figure is shaped as a human seated in a wheelchair, and includes an upper torso portion, a lower torso portion, a head portion, and a wheelchair portion having wheels on both sides of the human shape and a chair back at the rear of the human shape.

14. A design tool for use in association with design plans having hallways, doorways, stairways, rooms and other spaces of a known scale, for functional and space planning in the fields of architecture, interior design, and construction of residential and commercial structures, comprising:

- 5 a base having a first surface and a second surface, the second surface engageable with the design plans, the base scaled to indicate a turning radius to imitate the turning radius of a support device used by persons with disabilities and the aging population;
- 10 an icon figure attached to the first surface of the base, the icon figure sized to the scale of the design plans to allow accurate representation of the movement of persons with disabilities and the aging population along the hallways, doorways, stairways, rooms and other spaces of the design plan to visually illustrate the feasibility of movement along the noted paths in light of the size and turning radius of the represented person; and
- 15 a wand extending from and supporting the icon figure in operation of the design tool, the wand having a first end and a second end.

15. The design tool of claim 14, wherein the icon figure includes an opening having an upper end and a base, the opening corresponds in size to the first end of the wand, and the first end of the wand is maintained within the opening of the icon figure.

- 20 16. The design tool of claim 15, wherein the first end of the wand is maintained within the opening of the icon figure by frictional contact of the first end of the wand to the interior of the opening.

- 25 17. The design tool of claim 15, wherein the icon figure includes a metal plate located at the base of the opening, the first end of the wand includes a magnet, and the wand is maintained within the opening of the icon figure by the metal place-magnet combination.

- 30 18. The design tool of claim 15, wherein the opening of the icon figure includes first ridge members along the interior of the opening, the first end of the wand includes second ridge members corresponding to the first ridge members along the interior of the opening, and the wand is maintained within the opening of the icon figure by the snap-lock combination between the first and second ridge members.

19. The design tool of claim 14, wherein the base has a diameter equal to or greater than the diameter of the icon figure.

20. The design tool of claim 14, wherein the icon figure is shaped as a human seated in a wheelchair, and includes an upper torso portion, a lower torso portion, a head portion, and a wheelchair portion having wheels on both sides of the human shape and a chair back at the rear of the human shape.

21. A design tool for use in association with design plans having hallways, doorways, stairways, rooms and other spaces of a known scale, for functional and space planning in the fields of architecture, interior design, and construction of residential and commercial structures, comprising a means engageable with the design plans and scaled to indicate a turning radius to imitate the turning radius of a support device used by persons with disabilities and the aging population.

22. A design tool for use in association with design plans having hallways, doorways, stairways, rooms and other spaces of a known scale, for functional and space planning in the fields of architecture, interior design, and construction of residential and commercial structures, comprising a member means engageable with the design plans and scaled to indicate a turning radius to imitate the turning radius of a support device used by persons with disabilities and the aging population, and a means for supporting the member means in operation of the design tool.

23. A display package for use in association with a design tool having a scaled icon figure and corresponding base and used for functional and space planning in the fields of architecture, interior design, and construction of residential and commercial structures, comprising a support structure, a hole cut sized to receive the scaled icon figure and corresponding base so as to prominently display the icon figure outwards from the support structure, and an exterior cover into which the support structure is slidably encased for maintaining the design tool securely within the support structure.

24. The display package of claim 23, wherein the design tool further includes a wand extending from and supporting the icon figure and corresponding base and the support structure further comprises a hole cut sized to receive and prominently display the wand.